

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-2
NPDES NO. CA0006289

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

KAISER SAND AND GRAVEL COMPANY,
A SUBSIDIARY OF KOPPERS COMPANY, INC.
RADUM PLANT
PLEASANTON, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Kaiser Sand and Gravel Company, a subsidiary of Koppers Company, Inc., hereinafter called the discharger, by application dated July 5, 1984, has applied for renewal of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).
2. The discharger harvests and processes sand and gravel for construction aggregates and produces concrete and asphaltic concrete. Wastewater consisting of sand and gravel wash water and rising groundwater is settled before intermittent discharge to Arroyo del Valle, Shadow Cliffs Reservoir, and Arroyo Mocho. Groundwater from quarry pits and onsite wells is used to wash clays from the aggregates being processed. This wash water is pumped to a primary settling pond for in-plant reuse and recirculation to the washing plant. Excess water that accumulates in the settling ponds and quarry pits is discharged as follows:

<u>Discharge Point</u>	<u>Average Discharge Rate (mgd)</u>	<u>Maximum Discharge Rate (mgd)</u>	<u>Source Pond</u>	<u>Discharge Location</u>
001	2.7	3.4	Primary settling pond	Arroyo del Valle; Lat. 37° 40'05"; Long. 121° 50'36".
002	1.8	4.5	Primary settling pond	Shadow Cliffs Reservoir*; Lat. 34° 40'16"; Long. 121° 50'23".
003	3.6	5.6	Active Harvest Pit	Arroyo Mocho at facility entrance bridge; Lat. 37° 41'38"; Long. 121° 50'53".

* Wastewater is pumped to Shadow Cliffs Reservoir (via the same pipeline used for Discharge Point 001) on an as-needed basis as requested by the East Bay Regional Park District for water level control.

3. Sewage wastes are disposed of to an onsite septic system.
4. The discharge is presently governed by waste discharge requirements, Order No. 79-127 which prohibits discharge to Arroyo Mocho and Arroyo del Valle, tributaries of Alameda Creek, during the dry weather period from April 1 through December 1 of each year. This prohibition is in conformance with the Regional Board's 1975 Water Quality Control Plan for the San Francisco Bay Region.
5. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. the Basin Plan contains water quality objectives for Alameda Creek, Arroyo de la Laguna, Shadow Cliffs Reservoir, Arroyo del Valle, Arroyo Mocho and contiguous waters.
6. The beneficial uses of Alameda Creek, Arroyo de la Laguna, Shadow Cliffs Reservoir, Arroyo Mocho, Arroyo del Valle and contiguous water bodies are:

Water contact recreation
 Non-contact water recreation
 Wildlife habitat
 Warm fresh water habitat
 Fish migration and spawning
 Industrial service and process supply
 Municipal and domestic supply
 Agricultural supply
 Groundwater supply
 Fresh water replenishment

7. The surface water quality objectives for the Alameda Creek watershed above Niles, including Arroyo del Valle and Arroyo Mocho, are:

Total Dissolved	250 mg/l 90 day - arithmetic mean
Solids (TDS):	360 mg/l 90 day - 90th percentile
	500 mg/l daily maximum
Chlorides:	60 mg/l 90 day - arithmetic mean
	100 mg/l 90 day - 90th percentile
	250 mg/l daily maximum

Wastewater discharges that cause these surface water quality objectives to be exceeded may be allowed if they are part of an overall water-wastewater resource operational program developed by those agencies affected and approved by the Regional Board.

Waters designated for use as domestic or municipal water supply shall not contain concentrations of chemicals in excess of natural concentration or the limits specified in the California Administrative Code, Title 22, Chapter 15, particularly Tables 2, 3, 6, and 7.

8. The Board's 1975 Basin Plan did not allow any exceptions to the prohibition of discharge to the Alameda Creek watershed above Niles when no natural flow occurs. In accordance with the July 1982 amended Basin

Plan, the Board may allow exceptions to the dry weather discharge prohibition when the Board finds that the discharge does not contain characteristics of concern to beneficial uses in Alameda Creek. Furthermore, the Board may allow discharges to Alameda Creek and its tributaries, including Arroyo Mocho and Arroyo del Valle, that may cause surface water quality objectives to be exceeded if the discharge is part of an overall water-wastewater resource operational program developed by those agencies affected and approved by the regional Board. The following information supports the criteria to provide exceptions to the Basin Plan's dry weather discharge prohibition and shows compliance with surface water quality objectives and beneficial uses:

- a. The discharge contains no sewage-bearing wastes nor process waste added by the discharger's operations which are considered to be characteristics of concern to beneficial uses to Alameda Creek when no natural flow occurs.
- b. The discharger and zone 7 of the Alameda County Flood control and Water Conservation District (Zone 7) are developing a quarry reclamation plan to coordinate, in part, groundwater replenishment activities and surface discharge of excess groundwater that accumulates in quarry pits in the Livermore-Amador Valley. Zone 7 has previously approved temporary dry weather discharges to Arroyo Mocho and Arroyo del Valle from quarry operations containing TDS at ground water concentrations of 450-550 mg/l.
- c. The Alameda County Water District (ACWD) has previously accepted effluent limits and discharge conditions for temporary dry weather discharge from quarry operations in order to protect the ACWD's downstream domestic water supply uses. These effluent limits and discharge conditions are contained in these requirements.
- d. The discharger has experienced recent high water table conditions necessitating discharge during dry weather months since 1981. These conditions are caused by heavy rainfall, the Zone's groundwater replenishment program, and active quarrying at greater depths. The discharge is necessary because of excessive accumulation of groundwater in the discharger's active quarry pits which interfere with harvesting operations and/or threaten stability of quarry pit levees.

Based on the above information, the discharge as permitted in these requirements does not contain particular characteristics of concern to beneficial uses to the Alameda Creek watershed above Niles when no natural flow occurs and is consistent with the Basin Plan's criteria for compliance with surface water quality objectives for this body of water. Therefore, the discharger is given a waiver from the Basin Plan's dry weather discharge prohibition at this time. Future conditions and/or changes in the discharge may require revision of these requirements including a discharge prohibition.

9. Effluent limitation, toxic effluent standards, established pursuant to Section 301, 304, and 307 of the Clean Water Act and amendments thereto are applicable to the discharge.

10. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U.S. Environmental Protection Agency. Effluent limitations of this Order are based on the Basin Plan, State Plans and policies, current plant performance, and best engineering judgment. The limitations are considered to be those attainable by BAT, in the judgment of the Board.
11. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
12. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT Kaiser Sand and Gravel Company, a subsidiary of Koppers Company, Inc. in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The treatment, reuse, or disposal of wastewaters shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharge shall not contain silt, sand, clay or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discolorations in surface waters or to unreasonably affect or threaten to affect beneficial uses.
3. The discharge shall not contain sewage or toxic wastes.

B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits:

<u>Constituents</u>	<u>Units</u>	<u>30-day Average</u>	<u>Maximum Daily</u>
Total Dissolved Solids	mg/l	500	600
Turbidity	NTU	--	40
Total Settleable Matter	ml/l-hr.	0.1	0.2

2. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.
3. In any representative set of samples, the waste as discharged shall meet the following limit of quality:

TOXICITY: The survival of test fishes in 96 hour bioassays of the effluent as discharged shall be a median of 90% survival and a 90 percentile value of not less than 70% survival.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

a. Dissolved oxygen	5.0 mg/l minimum. Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
b. pH	Variation from natural ambient pH by more than 0.5 pH units.
c. Un-ionized ammonia	0.025 mg/l as N Annual Median 0.4 mg/l as N Maximum
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act

and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. Wastes from production and processing operations including storm runoff from areas used for loading or washing trucks, shall either be contained on site or routed into the sand and gravel wash water settling ponds.
2. The discharge shall provide the ACWD notice at least 24 hours prior to start-ups and planned shut-downs of discharge to surface streams.
3. Discharges to Shadow Cliffs Reservoir shall be made only upon request of the East Bay Regional Park District.
4. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 79-127. Order No. 79-127 is hereby rescinded.
5. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:

$$\text{Mass Emission Limit in lbs/day} = \text{Concentration limit in mg/l} \times 8.34 \times \text{Actual Flow in mgd averaged over the time interval to which the limit applies.}$$
6. The discharger shall comply with all sections of this order immediately upon adoption.
7. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
8. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977, except items A.5, A.7, A.9, A.12, A.16, B.2, and B.3.
9. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulations (40 CFR 122.41K).
10. Pursuant to Environmental Protection Agency regulations [40 CFR 122.42(a)] the Discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of a toxic pollutant not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits.
11. This Order expires January 16, 1990. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative code not later than 180 days in advance of such expiration date as application of issuance of new waste discharge requirements.

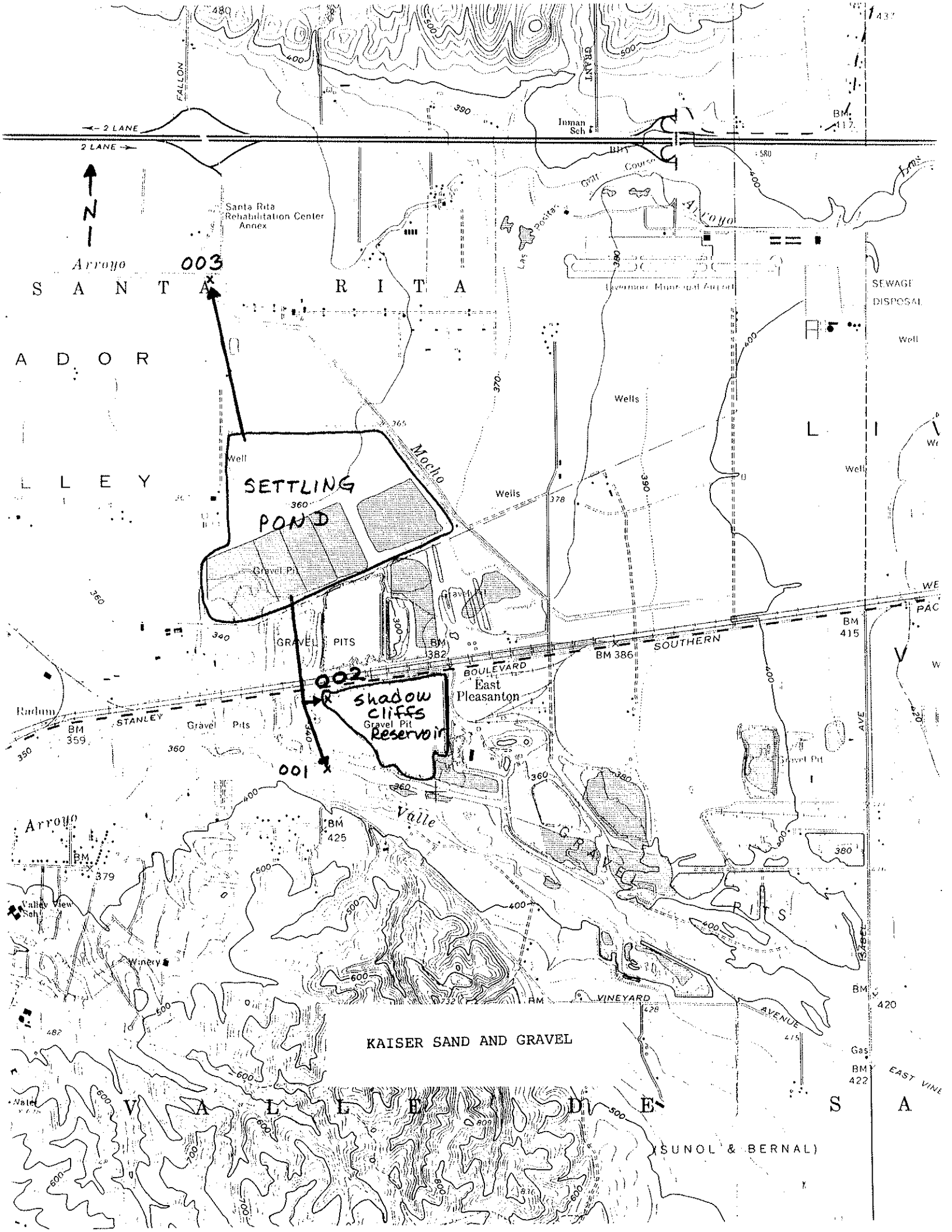
12. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall be come effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Roger B. James, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on January 16, 1985.

ROGER B. JAMES
Executive Officer

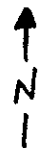
Attachments:

Map
Standard Provisions & Reporting
Requirements, April 1977
Self Monitoring Program



FALLON

2 LANE
2 LANE



Santa Rita
Rehabilitation Center
Annex

Arroyo

003

S A N T A R I T A

A D O R

L L E Y

SETTLING
POND

Mocha

Well

Wells

Wells

SEWAGE
DISPOSAL

Well

Well

GRAVEL PITS

BM 382

East Pleasanton

BM 386

SOUTHERN

BM 415

Radium

BM 359

STANLEY

Gravel Pits

002

Shadow
Cliffs
Reservoir

001

Valle

BM 425

Arroyo

BM 379

Valley View
Sch

Winery

KAISER SAND AND GRAVEL

V A L L E J O

(SUNOL & BERNAL)

Gas

BM 422

EAST VINE

AVENUE

428

415

BM 420

380

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

AMENDED
SELF-MONITORING PROGRAM
FOR

KAISER SAND AND GRAVEL COMPANY
A SUBSIDIARY OF KOPPERS COMPANY, INC.
RADUM PLANT
PLEASANTON, ALAMEDA COUNTY

NPDES NO. CA0006289

ORDER NO. 85-2

CONSISTS OF

PART A, dated 1/78

AND

PART B, ORDERED October 16, 1979
REVISED January 16, 1985

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

<u>Station</u>	<u>Descriptions</u>
E-1	At any point in the outfall containing wastes "001" and "002" between the point of discharge to Arroyo del Valle and Shadow Cliffs Reservoir, respectively, and the point at which all waste tributary to that outfall is present.
E-2	At any point in the outfall containing waste "002" between the point of discharge to Arroyo Mocho and the point at which all waste tributary to that outfall is present.

B. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1	At a point in Arroyo del Valle located 25 feet upstream from Discharge Point 001.
C-2	At a point in Shadow Cliffs Reservoir located within 50 feet of Discharge Point 002.
C-3	At a point in Arroyo Mocho located 50 feet upstream from Discharge Point 003.
C-4	At a point in Arroyo Mocho located 50 feet downstream from Discharge Point 004.

II. SCHEDULE OF SAMPLING AND ANALYSES

- A. The schedule of sampling and analyses shall be as given in Table I.
- B. A map showing the location and identity of each station sampled shall be submitted with each monitoring report.

III. MODIFICATION OF PART A (dated 1/78)

- A. Exclusions: Paragraphs C.3, C.4, C.5.c, C.5.d, C.5.e, D.1, D.4, E.2.c, E.3, E.4, and F.3.e.
- B. Modifications:

1. Paragraph E.2.b is modified to state that total waste flow for each discharge point shall be recorded in million gallons per day for each day of discharge during the monitoring period and this data shall be submitted with each monitoring report. If no discharge occurred, the report should state so.
2. Paragraph F.3 is modified to state that if no discharge occurred during the monthly reporting period, a letter certifying this shall be submitted.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 85-2.
2. Was adopted by the board on January 16, 1985.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

ROGER B. JAMES
Executive Officer

Attachment:
Table I

TABLE 1
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

CA0006289

Sampling Station	E-1,E-2,E-3			C-1 (a)		C-2		C-3 (a)		C-4 (a)	
Type of Sample	C-24	G	O	G	O	G	O	G	O	G	O
Flow Rate (mgd)	D										
Settleable Matter (mg/l & lbs/day)		W									
Fish Toxicity, 96-hr. TL-50 % Survival in undiluted waste		2/Y									
Turbidity (Nephelometric Turbidity Units)		W		W		Y		W		W	
pH (units)		W		W							
Dissolved Oxygen (mg/l & %Saturation)		M									
Temperature (° F)		M									
Total Dissolved Solids (mg/l & lbs/day)		M		M							
All Applicable Standard Observations			D		D		D		D		D

TYPES OF SAMPLES

G = grab sample
C-24 = composite - 24-hour
O = observation

TYPES OF STATIONS

E = waste effluent stations
C = receiving water stations

FREQUENCY OF SAMPLING

D = daily when discharging
W = once per week during each week in which discharge occurs
M = once per month during each month in which discharge occurs
Y = once per year during each year in which discharge occurs
2/Y = twice per year, during each spring (March-May) and fall (September-November) period in which discharge occurs

Footnote (a) = C stations shall be sampled only when there is naturally-occurring surface flow at the station.